

SEQUENCE LISTING

<110> NOVARTIS AG
NOVARTIS PHARMA GMBH

<120> OCULAR GENE THERAPY

<130> 116566-010

<140>

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<150> PCT/EP03/09497

<151> 2003-08-27

<150> 60/406,470

<151> 2002-08-28

<160> 25

<170> PatentIn Ver. 3.3

<210> 1

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1

His	Ser	His	Arg	Asp	Phe	Gln	Pro	Val	Leu	His	Leu	Val	Ala	Leu	Asn
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Ser	Pro	Leu	Ser	Gly	Gly	Met	Arg	Gly	Ile	Arg	Gly	Ala	Asp	Phe	Gln
		20						25					30		

Cys	Phe	Gln	Gln	Ala	Arg	Ala	Val	Gly	Leu	Ala	Gly	Thr	Phe	Arg	Ala
		35					40					45			

Phe	Leu	Ser	Ser	Arg	Leu	Gln	Asp	Leu	Tyr	Ser	Ile	Val	Arg	Arg	Ala
	50					55					60				

Asp	Arg	Ala	Ala	Val	Pro	Ile	Val	Asn	Leu	Lys	Asp	Glu	Leu	Leu	Phe
65					70					75					80

Pro	Ser	Trp	Glu	Ala	Leu	Phe	Ser	Gly	Ser	Glu	Gly	Pro	Leu	Lys	Pro
				85					90					95	

Gly	Ala	Arg	Ile	Phe	Ser	Phe	Asp	Gly	Lys	Asp	Val	Leu	Arg	His	Pro
		100						105					110		

Thr	Trp	Pro	Gln	Lys	Ser	Val	Trp	His	Gly	Ser	Asp	Pro	Asn	Gly	Arg
		115					120					125			

Arg	Leu	Thr	Glu	Ser	Tyr	Cys	Glu	Thr	Trp	Arg	Thr	Glu	Ala	Pro	Ser
	130					135					140				

Ala	Thr	Gly	Gln	Ala	Ser	Ser	Leu	Leu	Gly	Gly	Arg	Leu	Leu	Gly	Gln
145					150					155					160

Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
165 170 175

Ser Phe Met Thr Ala Ser Lys
180

<210> 2
<211> 551
<212> DNA
<213> Homo sapiens

<400> 2
acagccaccg cgacttccag ccggtgctcc acctggttgc gctcaacagc cccctgtcag 60
gcggcatgcg gggcatccgc ggggcccact tccagtgtt ccagcaggcg cgggcccgtgg 120
ggctggcggg caccttccgc gccttccgtg cctcgcgcct gcaggacctg tacagcatcg 180
tgccgcgtgc cgaccgcgca gccgtgccca tcgtcaacct caaggacgag ctgctgtttc 240
ccagctggga ggctctgttc tcaggctctg aggttccgt gaagcccggg gcacgcattc 300
tctcctttga cggcaaggac gtcttgaggc accccacctg gcccagaag agcgtgtggc 360
atggctcgga ccccaacggg cgcaggctga ccgagagcta ctgtgagacg tggcggacgg 420
aggctccctc ggccacgggc caggcctcct cgctgctggg gggcaggctc ctggggcaga 480
gtgccgcgag ctgccatcac gcctacatcg tgctctgcat tgagaacagc ttcattgactg 540
cctccaagta g 551

<210> 3
<211> 207
<212> PRT
<213> Mus musculus

<400> 3
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1 5 10 15
Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
20 25 30
Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
35 40 45
Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
50 55 60
Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
65 70 75 80
Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
85 90 95
Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
100 105 110
Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
115 120 125
Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His

130		135		140
Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr				
145		150		155
				160
Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu				
	165		170	175
Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr				
	180		185	190
Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys				
	195		200	205

<210> 4
 <211> 624
 <212> DNA
 <213> Mus musculus

<400> 4
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 cccctgtctg gaggcattcg tggatccgt ggagcagatt tccagtgtt ccagcaagcc 180
 cgagccgtgg ggctgtcggg caccttccgg gctttcctgt cctctaggct gcaggatctc 240
 tatagcatcg tgcgccgtgc tgaccggggg tctgtgccca tcgtcaacct gaaggacgag 300
 gtgctatctc ccagctggga ctccctgttt tctggctccc agggccaagt gcaaccggg 360
 gcccgcattc ttctttttga cggcagagat gtctgagac acccagcctg gccgcagaag 420
 agcgtatggc acggctcgga cccagtgagg cggaggctga tggagagtta ctgtgagaca 480
 tggcgaactg aaactactgg ggctacaggt caggcctcct ccctgtgtgc aggcaggctc 540
 ctggaacaga aagctgcgag ctgccacaac agctacatcg tctgtgcat tgagaatagc 600
 ttcatgacct ctttctccaa atag 624

<210> 5
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 5
 Ala Pro Gln Gln Glu Ala Leu Ala
 1 5

<210> 6
 <211> 38
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 6
 actggtgacg cggcccatat tcatcaggac tttcagcc

<210> 7
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 7
aagggtatc gatctagctg gcagaggcct at

32

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 8
cactgcttac tggcttatcg

20

<210> 9
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 9
ctgatgagta tgggccgcgt caccagtgg

29

<210> 10
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 10
aagggtatc gatctagctg gcagaggcct at

32

<210> 11
<211> 35
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
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<400> 11

gatctctaga ccaccatgca tactcatcag gactt

35

<210> 12

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
primer

<400> 12

actggagaaa gaggtttatc tagctactag

30

<210> 13

<211> 18

<212> PRT

<213> Adenovirus

<400> 13

Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Ala Val Cys Ser
1 5 10 15

Ala Ala

<210> 14

<211> 96

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 14

gatctctaga ccaccatgag gtacatgatt ttaggcttgc tcgcccttgc ggcagttctgc 60
agcgcggcc atactcatac tcatcaggac tttcag 96

<210> 15

<211> 29

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<400> 15
atcgatcata ctcacagga ctttcagcc 29

<210> 16
<211> 29
<212> DNA
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<400> 16
gcggccgcct atttgagaa agaggtcat 29

<210> 17
<211> 23
<212> DNA
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primer

<400> 17
tttttttttc agtgtaaaag gtc 23

<210> 18
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
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primer

<400> 18
cagatgacat cctggccag 19

<210> 19
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 19
ctatacagga aagtatggca gc 22

<210> 20

<211> 118
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 20
gccaaagcttc catgagggcc tggatcttct ttctcctttg cctggccggg agggctctgg 60
cagcccctca gcaagaagcg ctgctcaca gccaccgca cttccagccg gtgctcca 118

<210> 21
<211> 123
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 21
ccaggtggag caccggctgg aagtcgcggt ggctgtgagc gagcgcttct tgctgagggg 60
ctgccagagc cctcccggcc aggcaaagga gaaagaagat ccaggccctc atggaagctt 120
ggc 123

<210> 22
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 22
gcgcatgtcg acagaatatg ggccaaac 28

<210> 23
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 23
gcgctactgc agagctaata agctacac 28

<210> 24
<211> 27
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 24

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27

<210> 25

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 25

gcttcgaacg cgtagcggcc aaccctc

27